

**To:** Sisk, Richard[Sisk.Richard@epa.gov]  
**Cc:** Madigan, Andrea[Madigan.Andrea@epa.gov]; McCaffrey, Shawn[Mccaffrey.Shawn@epa.gov]; Naftz, Douglas[Naftz.Douglas@epa.gov]  
**From:** Rudy, Michael  
**Sent:** Tue 10/13/2015 2:54:53 PM  
**Subject:** FW: Upper Animas Maps [GIS Data]  
Sec 16 Example of Location Variations btw Sources For Discussion Only.pdf  
DataforEPA.piz  
Pages from BLM-001.jpg

FYI

*Mike Rudy*

*Senior Enforcement Specialist/Civil Investigator*

*US EPA Region 8 Mail Code: ENF-RC*

*Denver, Colorado 80202-1129*

*Tel. No. (303) 312-6332, Fax No. (303) 312-7519*

*E-mail: [rudy.mike@epa.gov](mailto:rudy.mike@epa.gov)*

NOTICE: The information contained in this e-mail is intended only for the use of the recipient(s) named above. This message and any attachments may contain confidential or privileged information. If the reader is not the intended recipient or an agent responsible for delivering it to the intended recipient, you have received this document in error and any review, dissemination, disclosure, distribution, use, or copying of the contents of this message is strictly prohibited. If you have received this communication in error, please notify me immediately by e-mail or telephone and destroy all copies of the original message and any attachments.

**From:** Darren Morris [mailto:dmorris@toeroek.com]  
**Sent:** Monday, October 12, 2015 2:02 PM  
**To:** Rudy, Michael  
**Cc:** Lindsay Garner  
**Subject:** Upper Animas Maps [GIS Data]

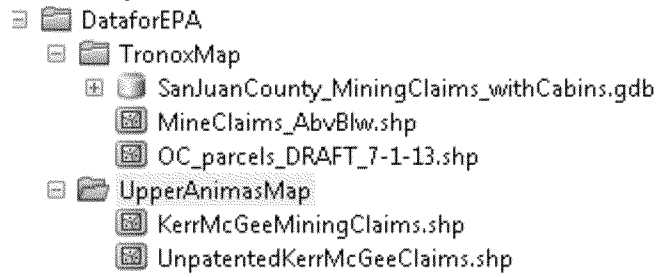
Mike,

Per your request, Toeroek is providing its GIS files for two maps: (1) the Upper Animas Map which shows the Upper Animas Mining District Site Claims, neighboring patented claims owned by Kerr-McGee, and unpatented claims in the vicinity owned by Kerr-McGee; and (2) the Tronox Red Mountain Map which depicts patented claims that Kerr-McGee owned in the Red Mountain and Eureka Mining Districts in Ouray and San Juan Counties.

Please note that there are several challenges with mapping mining claims in this area. Each data set that Toeroek obtained mapped the claims in different locations (1-PLSS, 2-BLM Connecting Sheets, and 3-County Data). The attached PDF file titled Sec 16\_ Example of Location Variations btw Sources\_For Discussion Only.pdf, shows the relatively vast location discrepancies between sources – see the one claim that is shaded in and how it appears in three separate locations.

It is now known that the PLSS data provides the most accurate boundary locations; however, the PLSS data can still vary from the actual on-the-ground locations and the PLSS data does not necessarily provide locations for all patented claims. As you are aware, EPA is currently having the mining claims in the Cement Creek Area surveyed. Toeroek is working with EPA's Land Surveyor to obtain GIS data on the actual boundary locations so that it can update its maps and records accordingly. *The surveyed land data is still pending.*

Attached is a zip file with the mining claim data used to create the Upper Animas Map and Tronox Red Mountain Map; the data is separated into two folders corresponding to each map. Please note that the shapefile of unpatented claims in the UpperAnimasMap folder only contains the unpatented claims that are visible within the Upper Animas map. The remaining unpatented claims are shown in source document BLM-001, which is attached. The locations for the Upper Animas Map are based on PLSS data, which was then supplemented by the County data to ensure all claims are captured. The TronoxMap folder contains shapefiles created by Toeroek and a geodatabase provided by San Juan County. When San Juan County provided that geodatabase, they informed a Toeroek analyst that the mining claim boundaries were approximately 2,000 feet off. These claims were shifted by Toeroek to match up with the PLSS data, which contains some mining claim boundaries. This shifted layer is MiningClaims\_AbvBlw.shp, and is about 2,400 feet off from the San Juan County geodatabase data.



To open the attached DataforEPA file, the extension will need to be changed from .piz to .zip.

Please note that once the surveyed land data is available, it is strongly recommended that both data sets be updated based on the ground-truthed locations.

Lastly, if any specific questions arise as EPA begins to work with the GIS data, you are welcome to talk directly to Toeroek's GIS Specialist, Zoe Statman-Weil at (510) 899-4606.

Sincerely,

Lindsay and Darren

**Lindsay Garner**

720-898-4105

**Darren M. Morris**

720-898-4104

